C O U R S E G U I D E – s h o r t f o r m

Academic year 2024-2025

Course name[1]	Simulation and experiment applied to stresses and strains analysis (1)					Course code		MATAE IA 109	
Course type[2]	DID	Category[3]	DS	Year of study	I	Semester	2	Number of credit points	4

Faculty	Faculty of Materials Science and Engineering	Number of teaching and learning hours[4]					
Field	Materials engineering	Total	L	T	LB	P	IS
Specialization	MATAE	100	28		14		58

Pre-requisites from the curriculum[5]	Compulsory	
	Recommended	

General objective [6]	Introducing the appropriate mathematical instruments in order to define stress and strain state generated during forming
Specific objectives[7]	• Give of the needed data related to model the forming processes of the advanced materials.
Course description[8]	Stress field, strain field, link between those into advanced materials forming process. Forming of the advanced materials. Basic concepts related to finite element analysis.

Assesment			Sche-dule[9]	Percentage in the final grade (minimum grade)[10]
A. Final assessment form [11]: Colloquium	Class tests along the semester	20%	week7	60% (minimum 5)
	Home works	%		
	Other activities	%		
	Colloquium	80% (mini-mum 5)	Session	
B. Seminar	Activity during seminar			% (minimum 5)
C. Laboratory	Acttvity during laboratory			40% (minimum 5)
D. Project	Activity during project			% (minimum 5)

Course organizer	Professor Habil. PhD. Eng. Stefan Lucian TOMA	
Teaching assistants	Lecturer PhD. Eng. Alin Marian CAZAC	

[1]Course name from the curriculum
[2] DF – fundamental, DID – in the field, DS – specialty, DC – complementary (from the curriculum)
[3] DI – imposed, DO –optional, DL – facultative (from the curriculum)
[4] Points 3.8, 3.5, 3.6a,b,c, 3.7 from the Course guide – extended form (L-lecture, T-tutorial, LB-laboratory works, P-project, IS-individual study)
[5] According to 4.1 – Pre-requisites - from the Course guide – extended form
[6] According to 7.1 from the Course guide – extended form
[7] According to 7.2 from the Course guide – extended form
[8] Short description of the course, according to point 8 from the Course guide – extended form
[9] For continuous assessment: weeks 1 – 14, for final assessment – colloquium: week 14, for final assessment-exam: exam period

[10] A minimum grade might be imposed for some assessment stages
[11] Exam or colloquium